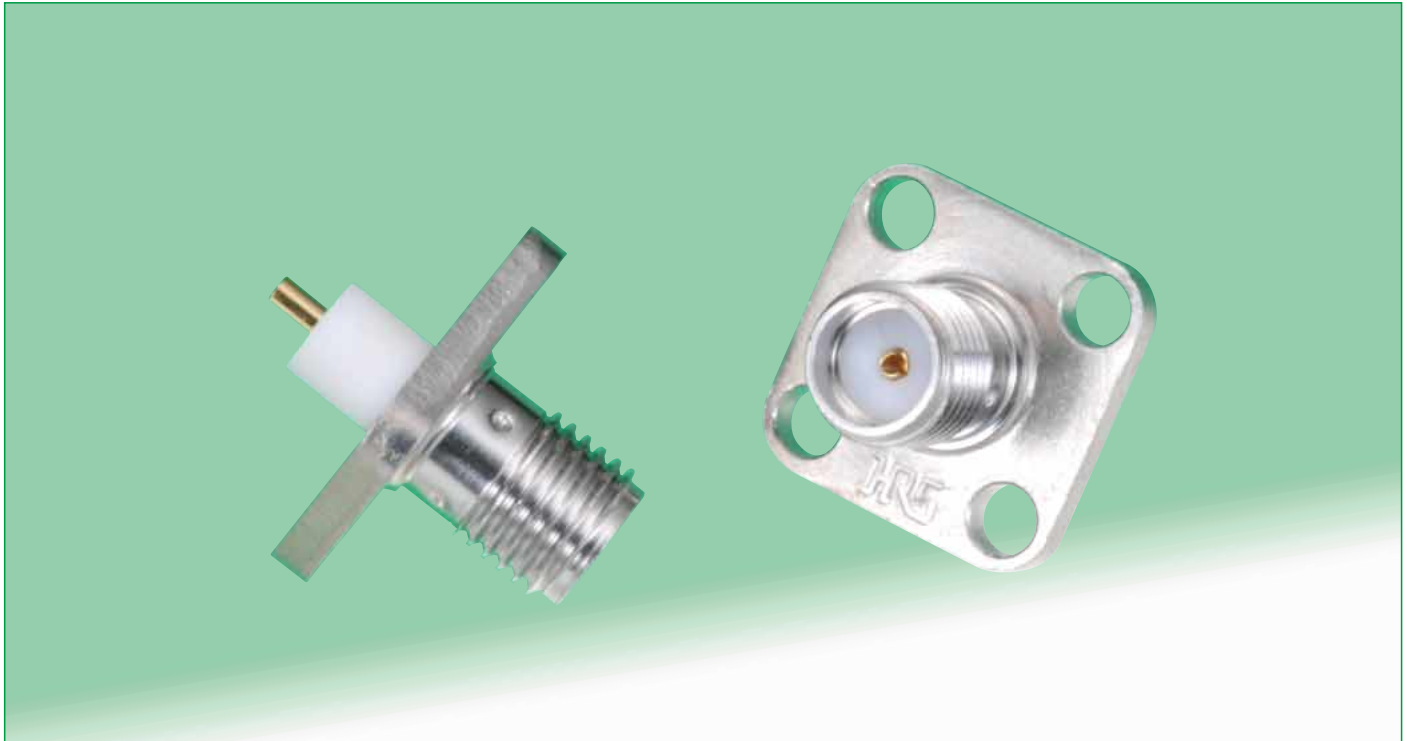


**NEW**

# Low-Cost SMA Coaxial Connectors (Version 2)

## HRM(V) Series



### ■ Features

#### 1. Reduced cost

A change in the manufacturing methods makes the connectors more economical to use.

#### 2. Complete compatibility with SMA Coaxial Connectors

#### 3. High degree of impedance matching

V.S.W.R. of 1.2 max. for frequencies of DC to 10 GHz  
V.S.W.R. of 1.3 max. for frequencies of 10 to 18 GHz

#### 4. High durability

500 mating /un-mating cycles, with corresponding connector.

#### 5. RoHS compliant

All components and materials comply with the requirements of EU Directive 2002/95/EC.

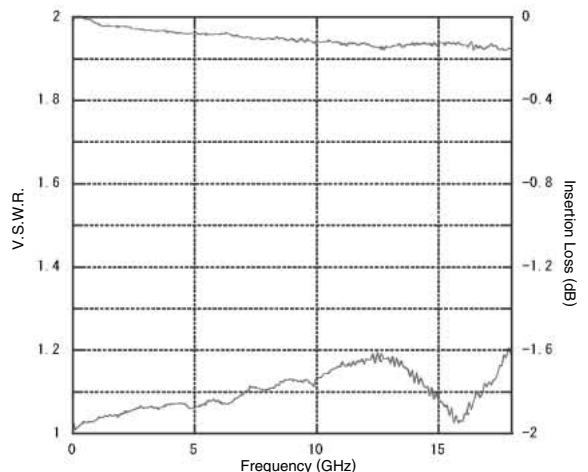
### ■ Applications

Mobile communications base stations, microwave equipment, measuring instrumentation and other applications requiring use of reliable coaxial connections with SMA connectors.

### ● Typical Data

Measurement system 

HRM(V) Series	Measurement Adapter
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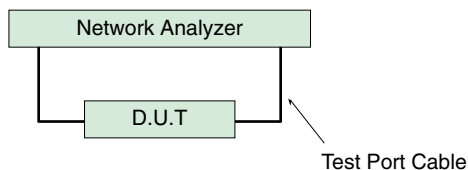
## ■ Specifications

Ratings	Nominal characteristic impedance	50Ω	Operating temperature range	-55°C to +85°C
	Frequency range	DC to 18 GHz	Operating relative humidity	95% max.

Item	Specification	Conditions
1. Insulation resistance	5000M Ω min.	500V DC
2. Withstanding voltage	No flashover or insulation breakdown	1,000 V AC / 1 minute
3. Contact resistance	Center contact: 6 mΩ max. Outer shell: 6 mΩ max.	100 mA max.
4. Center contact retention	0.3 N min.	Measured with 0.9017 mm dia. pin gauge
5. V.S.W.R.*	1.2 max. 1.3 max.	DC to 10 GHz 10 to 18 GHz
6. Vibration	No electrical discontinuity of 1 μs or longer No damage, cracks, or parts dislocation	Frequency: 10 to 2,000 Hz, single amplitude of 0.75 mm, acceleration of 196 m/s <sup>2</sup> , 4 hours in each of the 3 directions
7. Moisture resistance	Insulation resistance: 100 MΩ min. (high humidity) Insulation resistance: 5,000 MΩ min. (dry) No damage, cracks, or parts dislocation	10 cycles (240 hours) at a temperature of +25 to +65°C, and humidity of 90 to 98%
8. Temperature cycle	Contact resistance Center contact: 8 mΩ max. Outer shell: 8 mΩ max. No damage, cracks, or parts looseness	Temperature: -55°C → +5°C to +35°C → +85°C → +5°C to +35°C Time: 30 min. → 5 min. → 30 min. → 5 min. 5 cycles
9. Durability	Contact resistance Center contact: 8 mΩ max. Outer shell: 8 mΩ max. No damage, cracks, or parts dislocation	500 cycles
10. Salt spray	No corrosion	5% salt water solution, 48 hours

\*V.S.W.R. Measurement System

Measured as shown on the block diagram below.



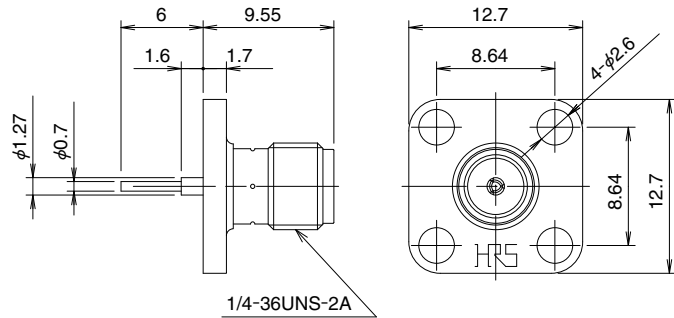
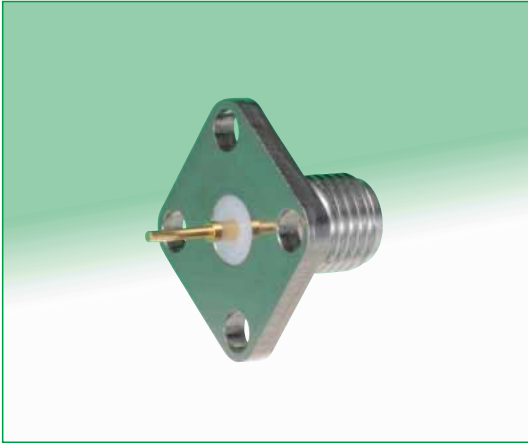
Note 1: Board connectors were measured while mounted to a dedicated adapter.

## ■ Materials / Finishes

### ● Receptacle

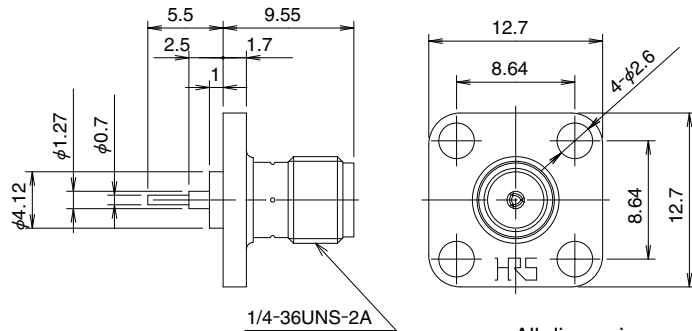
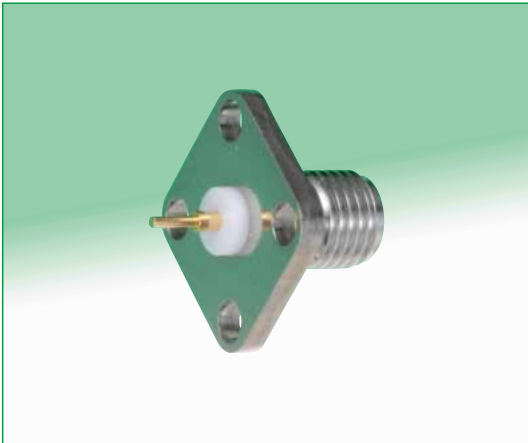
Part	Material	Finish
Shell	Stainless steel	Passivated
Female center contact	Beryllium copper	Gold plated
Center contact	Brass	Gold plated
Insulator	PTFE	—

## Receptacles



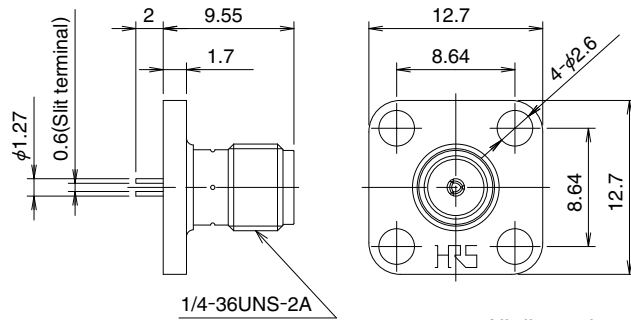
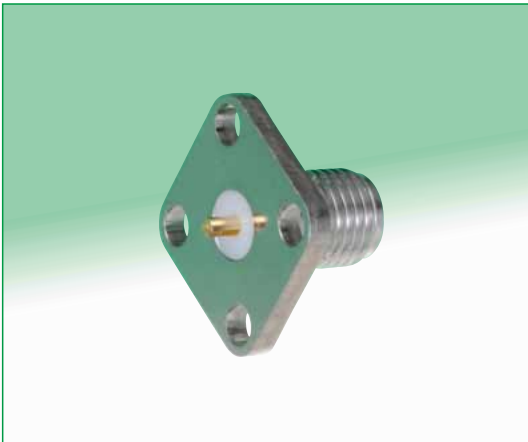
All dimensions: mm

Part Number	CL No.	RoHS
HRM(V)-301S	323-0884-5	YES



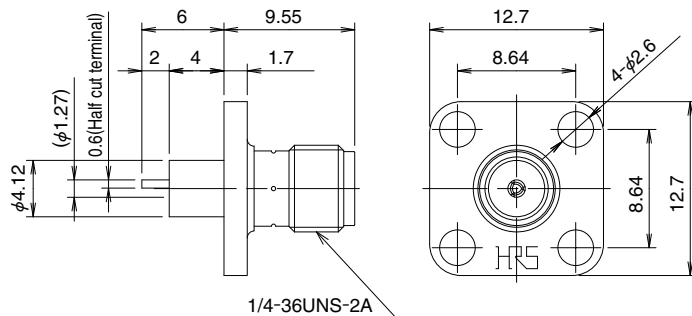
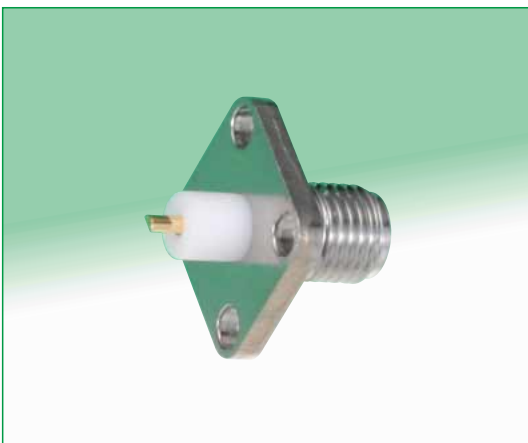
All dimensions: mm

Part Number	CL No.	RoHS
HRM(V)-302S	323-0885-8	YES



All dimensions: mm

Part Number	CL No.	RoHS
HRM(V)-304S	323-0886-0	YES



All dimensions: mm

Part Number	CL No.	RoHS
HRM(V)-306S	323-0879-5	YES

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. Headquarters**

2688 Westhills Court, Simi Valley, CA 93065-6235  
 Phone : 1-805-522-7958  
 Fax : 1-805-522-3217  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. North California Office**

20400 Stevens Creek Blvd., Ste 250, Cupertino, CA 95014  
 Phone : 1-408-253-9640  
 Fax : 1-408-253-9641  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. Dallas Office**

1701 N. Greenville Ave. Ste 817, Richardson, TX 75081  
 Phone : 1-469-330-9200  
 Fax : 1-469-330-9205  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. Chicago Office**

2777 Finley Road, Suite 28 Downers Grove, IL 60148  
 Phone : 1-630-916-1455  
 Fax : 1-630-916-1451  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. New York Office**

510 Broadhollow Road, Suite 305, Melville, NY 11747  
 Phone : 1-516-249-5259  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. Detroit Office (Automotive)**

37650 Professional Center Drive, Suite 120A, Livonia, MI 48154  
 Phone : 1-734-542-9963  
 Fax : 1-734-542-9964  
<http://www.hiroseusa.com>

**GERMANY:**

**HIROSE ELECTRIC GmbH**

Herzog-Carl-Strasse 4 D-73760 Ostfildern (Scharnhäuser Park)  
 Phone : 49-711-4560-02-1  
 Fax : 49-711-4560-02-299  
<http://www.hirose.de>

**THE NETHERLANDS:**

**HIROSE ELECTRIC EUROPE B.V.**

Beechavenue 46,1119 PV Schiphol-Rijk  
 Phone : 31-20-6557490  
 Fax : 31-20-6557469  
<http://www.hiroseeurope.com>

**FINLAND:**

**Hirose Electric Europe B.V. Finland Office**

Teknobulevardi 3-5 01530 VANTAA  
 Phone : 358-9-2517-8459  
 Fax : 358-9-2517-8460  
<http://www.hiroseeurope.com>

**UNITED KINGDOM:**

**HIROSE ELECTRIC UK LTD.**

Crownhill Business Centre 22 Vincent Avenue Crownhill, Milton Keynes MK8 OAB  
 Phone : 44-1908-305400  
 Fax : 44-1908-305401  
<http://www.hirose.co.uk>

**CHINA:**

**HIROSE ELECTRIC CO., LTD. Beijing Office**

Unit 1605, Block A, ZhuBang2000 BusinessCenter, No.100, Balizhuang Xili, Chaoyang District, Beijing, 10025  
 Phone : 86-10-5165-9332  
 Fax : 86-10-8586-1418  
<http://www.hirose-china.com.cn>

**CHINA:**

**HIROSE ELECTRIC (SHANGHAI) CO., LTD.**

1501-02, Cross Tower Building 318 Fuzhou Road, Huang Pu District Shanghai, 200001  
 Phone : 86-21-6391-3355  
 Fax : 86-21-6391-3335  
<http://www.hirose-china.com.cn>

**CHINA:**

**HIROSE ELECTRIC CO., LTD. Shenzhen Office**

Room 1902-05, Office Tower Shun Hing Square, DiWang Commercial Centre 5002 ShenNanDong Road, ShenZhen  
 Phone : 86-755-8207-0851  
 Fax : 86-755-8207-0873  
<http://www.hirose-china.com.cn>

**HONG KONG:**

**HIROSE ELECTRIC CO., LTD.**

Unit 1102, Energy Plaza, 92 Granville Road, Tsim Sha Tsui East, Kowloon  
 Phone : 852-2803-5338  
 Fax : 852-2591-6560  
<http://www.hirose-hongkong.com.hk>

**TAIWAN:**

**HIROSE ELECTRIC TAIWAN CO., LTD.**

No.28 Lane 247 Sec. 2 Yen Ping N,Rd.Taipei  
 Phone : 886-2-2557-7351,7352  
 Fax : 886-2-2552-9851  
<http://www.hirose-taiwan.com.tw>

**SINGAPORE:**

**HIROSE ELECTRIC CO., LTD.**

10 Anson Road #26-16 International Plaza 079903  
 Phone : 65-6324-6113  
 Fax : 65-6324-6123  
<http://www.hirose-singapore.com.sg>

**KOREA:**

**HIROSE KOREA CO., LTD.**

(#2NA311,Shihwa Industrial Complex),1261-10, Jeungwhang-Dong, Shihung-City, Kyunggi-Do 429-450  
 Phone : 82-31-496-7000,7124  
 Fax : 82-31-496-7100  
<http://www.hirose.co.kr>



**HIROSE ELECTRIC CO.,LTD.**

5-23,OSAKI 5-CHOME,SHINAGAWA-KU,TOKYO 141-8587,JAPAN  
 PHONE: 81-3-3491-9741, FAX: 81-3-3493-2933  
<http://www.hirose.com>  
<http://www.hirose-connectors.com>